AMERICAN MUSEUM ⁂ NATURAL HISTORY

EMERGENCY PREPAREDNESS AND RESPONSE PLAN FOR COLLECTIONS, LIBRARIES, & ARCHIVES

1. PROJECT DESIGN

The American Museum of Natural History (AMNH) requests a grant of $149,207 over 24 months to develop an Emergency Preparedness and Response Plan for its collections, libraries, and archives. The primary goal is to outline the resources needed and the procedures required to preserve and protect the Museum's scientific collections in the event of a disaster. The project will assure the preservation of AMNH specimens and artifacts as the foundation for scientific research, exhibition, and education and serve as a model for other institutions with natural science collections.

The Emergency Preparedness and Response Plan furthers the AMNH's strategic goals and mission by joining in a single coordinated team staff responsible for the content and care of the collections with staff responsible for the operation of the Museum's physical facilities. It will create:

- A comprehensive understanding of business continuity, emergency preparedness and disaster response procedures concerning the AMNH collections;
- A diagram of the interrelation of staff and departments necessary to continue operations essential to preservation and protection; and
- A blueprint for the allocation of limited Museum resources in the event of a disaster in a manner that recognizes the essential role of the collections.

The development, implementation, and dissemination of this plan is an initiative of the highest institutional priority and has the full support of its leadership.

Need and Prior Efforts

As the Museum's strategic plan states, the AMNH "collections [are] a priceless and irreplaceable record of life on Earth." A few hours (or even minutes) post-disaster to deliberate the best course of action for salvage could result in the loss of irreplaceable specimens forever. Having a comprehensive disaster preparedness and response plan in place is essential to collections stewardship, management, and conservation.

Since its founding in 1869, the AMNH has been steadfastly committed to its joint mission of scientific research and public education. The Museum's collections, global in scope and now numbering more than 32 million items, support this dual mission. Distributed among five Science Divisions (Anthropology, Invertebrate and Vertebrate Zoology, Paleontology, and Physical Sciences) and supported through extensive library and archive materials, the collections encompass such diverse materials as cultural artifacts, whole preserved animals, skins, skeletons, fossils, meteorites, insects, rocks, and, most recently, frozen tissue. The AMNH Natural History Library is the largest in the western hemisphere, with nearly 500,000 volumes and 1,600 linear feet of archives. The individual Science Divisions maintain their own libraries and archives numbering nearly 150,000 volumes and 5,000 linear feet of archives (Appendix 1). Over the last decade, AMNH's strategic planning priorities have allocated increasing resources to the collections' management and preservation, which constitute a major repository of the nation's cultural heritage and the international research community's scientific data.

The events of September 11, 2001 and subsequent events in Prague and New Orleans underscored the importance of a comprehensive, integrated approach to institutional disaster planning. The Heritage Health Index survey report (April 2006) identified emergency planning as an urgent priority for the nation's cultural institutions, finding that fully 80% of collecting institutions and 86% of archeological repositories/scientific research collections have no such plans or staff trained to carry them out. Fewer than 17% of institutions have a written long-range plan for collections care, and only 26% have copies of vital collections records stored off-site. Capacity is a pressing issue: "There is an urgent need for 'general training and skills transfer' from major museums and universities to the large array of institutions …that …cannot afford to train their own staff."

In the past five years, AMNH has made significant progress in its disaster recovery planning efforts, and is now positioned for a new initiative to develop and implement a full-scale emergency preparedness and response plan that will protect its collections and help to advance the efforts of other national cultural institutions. In the past three years, the Museum has undertaken a series of major initiatives that are prerequisites to the development of the Emergency Preparedness and Response Plan proposed here. These include:
1. Scientific Collections Risk Assessment. In 2004, IMLS funded a Museums for America (MfA) grant to AMNH to conduct a comprehensive analysis of its collections and the nearly 100 specific risks that apply to them. Resulting data are being used to prioritize institution-wide collections needs and conservation planning and guide the planning for salvage, recovery, and protection of the collections.
2. Primary Catalog Duplication Project. In the fall of 2006, with support from the Mellon Foundation, AMNH began to digitize and microfilm the Museum's nearly one million catalog records. These records list and identify specimens, noting critical location, identification, and collector data and are nearly as important as the specimens themselves; the loss of such a record reduces the scientific utility of the specimen significantly.
3. Pilot/Draft Preparedness and Response Plan for the Department of Mammalogy (Appendix 2). In 2006, the AMNH piloted the development of an Emergency Preparedness and Response Plan, with the Department of Mammalogy serving as a test bed for the current project. First, procedures to address loss of technology, loss of facility, and unavailability of staff were designed to protect the business of managing its collection of more than 400,000 specimens. Second, procedures to address the most appropriate and effective techniques for response operations were designed to protect the specimens themselves. The process demonstrated the viability of disaster planning applied to collections-based departments, and the pilot will guide the project proposed here.

As one of the leading collections-based institutions in the world, AMNH takes seriously its responsibility to the field. In 2004, the NSF funded AMNH to convene a workshop on emergency preparedness and salvage at the annual meeting of the Society for the Preservation of Natural History Collections (SPNHC), and to launch the MuseumSOS website that will be used for this project's proposed widespread dissemination. AMNH has the museum and collections networks and technology in place to carry out a robust dissemination plan.

The institutional structure for this project is also in place. Under the direction of the Senior Vice President for Operations, the Museum maintains an active 13-member Disaster Recovery Team with participation from Operations, Science, Finance, and Information Technology. The Recovery Team is charged with developing preparedness measures and procedures to maintain operational stability, financial liquidity, and collections preservation following a disaster. Business continuity plans have been developed for key operations departments; the firm of Ernst &Young reviewed the Museum's continuity and recovery efforts to date and ranked them high relative to private sector and other non-profit organizations. Finally, the Museum President announced to senior management that emergency response and disaster recovery planning is a Museum and Board of Trustees priority, and that Museum-wide cooperation is required in the planning efforts.

Plan of Work
This new 24-month project will work toward protecting and preserving the collections and serve as a resource to the field. To produce a comprehensive plan, prepare AMNH staff, and inform the field, AMNH will: 1) Develop individual preparedness and response plans for the Scientific departments and the Library; 2) Design a system of continuous staff training; 3) Produce a final, coordinated Collections, Libraries and Archives Emergency Preparedness and Response Plan; 4) Create products essential to the success of the Emergency Preparedness and Response Plan; and 5) Conduct internal and external dissemination.

The Disaster Recovery Team will oversee the process through its subgroup, the Disaster Recovery Task Force (the Task Force) composed of the Conservator of Natural Sciences Collections, the Director of Operational Analysis, the Director of Environmental Health and Safety, and the Collections Analyst. The Task Force will

work closely with collections and operations staff to carry out project tasks and coordinate the planning across the multiple departments and divisions. The tasks are to:

Develop preparedness and response plans. This effort will involve 34 collection units across the five Scientific Divisions and the Library/Archives. Each unit will examine its collections with respect to 11 risks identified as priorities by the Risk Assessment (Appendix 3). The Task Force will meet with curators, conservators, and collections managers as well as critical operations staff to evaluate scenarios and develop guidelines for:

1. Preparedness (risk analysis, plan membership and roles, communication procedures, activation);
2. Business Continuity (procedures in case of loss of technology, facility and unavailability of staff); and
3. Collections Response and Recovery (health and safety issues, stabilization of facilities, alternate work/ storage sites, move plans, insurance claims and documentation processes, carrying out of salvage operations).

Considerable data collection, planning, and consensus will be required of each department in order to complete their individual plans, including: documentation and inventory control; salvage priorities (e.g., specimens of high scientific value or particularly vulnerable to said hazard); internal and external contact information; and identification of vendors, resources, and expertise necessary to carry out the plan. The Task Force will develop a database to capture this information (Appendix 4). It will be updated on a continual basis and made accessible to critical staff. The content of the plans will be customized to accommodate differences in materials, structure, staffing, and location of each department. The Task Force will cross-reference the departmental plans to ensure Museum-wide coordination and effective response.

Design system of staff training. The size, diversity, and mobility of the AMNH staff require an ongoing system of emergency response training that is integrated into each department and the institution as a whole. The project will use a Train-the-Trainers approach to build long-term internal capacity and create a team of knowledgeable staff who will train and produce training guides for future employees and external audiences:

1. Train the Preparedness and Response Team. At two points within the 24-month project period, consultants with expertise in response and salvage techniques for collections and library/archives materials will conduct intensive sessions to train an 18-person Preparedness and Response Team (Team) that includes point staff from each department (Appendix 5). Training will cover immediate response (roles, re-entry, documentation, health and safety, resources, disaster scenarios and role playing exercises) (one day) and salvage of collections (one and a half days) (Appendix 6). During the project period and beyond, the Team members will be expected to conduct initial training of staff in their departments and to set a schedule for renewal/update training and training of incoming staff. To ensure that this happens on a continuing basis, the Task Force will meet with the Team quarterly for plan updates and to revise the training as needed.
2. Produce training protocols and guides that can be shared with other institutions. The Task Force, with assistance from the expert consultant and trainers, will develop an online guide that includes agendas, training schedules, topics, how-to activities, background information, and essential maps and diagrams. Based on discussions with other collections-based institutions, the Task Force will compile the materials that are generic or serve as good case examples into a short guide for the external website, described below.

Produce final coordinated Collections Emergency Response and Preparedness Plan. The Task Force will incorporate all the data and procedures generated by the risk assessment, business continuity, and response/ recovery planning into successive drafts that will be tested and reviewed by AMNH leadership and the external consultant. The final plan will prioritize the collections salvage needs of scientific departments, coordinate departmental efforts across the Museum, and provide detailed guidelines for response in the event of small scale (e.g. leak/flood, pest outbreak) and/or large-scale (e.g. hurricane, fire) disaster. It will be formally presented to the Senior Vice President/Provost of Science and the Senior Vice President of Operations, and from them to the President and the Board for inclusion into business continuity and strategic planning efforts.

Create products essential to the plan. As described above, the project will produce print and online products to guide recovery efforts at AMNH and in other institutions. These include: the departmental plans and the final plan; department databases and how-to guides that compile and make essential information readily accessible to staff; and training guides and protocols for AMNH use with versions for the field. As part of its service to the field, AMNH will also produce a 10-page summary of the planning process and critical steps and issues for other collections-based institutions to consider. The internal evaluator (project director) will author this piece, based on documentation of the process and collation of key activities.

A newly designed website will connect two existing sites and support communication, information exchange, and dissemination. The AMNH internal website http://museum.internal.amnh.org/disasterrecovery/ will be refashioned to include the emergency preparedness and response plans as well as other resources relevant in the planning and response phases of an emergency. The MuseumSOS website www.museum-sos.org will be linked to serve as the site for dissemination to the field. It will include non-proprietary versions of business continuity, preparedness, and response plans; methodologies and templates for developing the AMNH Emergency Preparedness and Response Plan; database structures for storing critical information; and training materials.

Disseminate to the museum community. AMNH will share lessons learned and products noted above with other collections-based institutions. While the primary audience is those that specialize in natural history collections, AMNH expects that significant aspects of the process will be applicable to other large-scale collections, libraries and art museums as well. AMNH will:
1. Present lectures and conduct training at professional conferences, including SPNHC, the American Institute for Conservation, and other related groups.
2. Publish in journals such as *Collections Forum* and the *Journal of the American Institute for Conservation.*
3. Launch, maintain, and update the SOS website as a base for others to share progress, insights, and products.

Evaluation and Process for Mid-project Corrections
Project evaluation will be conducted internally by project team members, and externally by Barbara Roberts, an independent emergency planning consultant. The administrative evaluation will track completion of essential tasks via weekly meetings, regular progress updates, real-time task lists, and quarterly interviews of key project staff. Formative evaluation will provide continuous feedback for mid-course corrections. It will 1) cull the results of the prior efforts to draw out lessons and recommendations, so the project builds on a systematic and shared base of knowledge; 2) document the process for developing plans and products; and 3) gather feedback from the Disaster Recovery Team, the Task Force, the Preparedness and Response Team, and outside experts on similar plans and products. Its most critical component will be the testing and review of the departmental plans and the final comprehensive Emergency Preparedness and Response Plan. Such testing will use table-top exercises and drills, which will be evaluated to determine what sections need to be updated or require greater detail and focus. The formative evaluation will produce quarterly reports for the project directors that summarize progress to date and provide data for changes based on its findings.

Outcome evaluation will be conducted by the external evaluator who will review the plans' quality and viability. Data sources will include: formative testing, Risk Assessment, criteria and needs outlined in Heritage Health Index's report, and other standards-setting documents and expert sources to determine the extent to which the project has achieved its goal of being prepared to protect and preserve AMNH's priceless collections.

2. GRANT PROGRAM GOALS: TO SUSTAIN CULTURAL HERITAGE
The Museum's natural science and cultural holdings of over 32 millions specimens and artifacts are a precious legacy held in trust for the use of present and future generations. Including diverse forms ranging from fluid-preserved and mounted specimens and skeletal materials to minerals, gems, and ethnographic material, the collections document the evolution and complexity of the natural world and the history and ethnology of human

cultures. They are not a passive archive, but a dynamic, evolving resource; more than 90,000 new specimens are acquired annually (primarily through the Museum's own scientific expeditions), and new collections, such as digitized astrophysical data and images and a cryo-preserved tissue collection, have been created to address emerging scientific questions and research needs. Among the highlights are the world's most comprehensive collection of invertebrate and vertebrate fossils; 500,000 cultural artifacts, including objects from hundreds of extant and extinct cultures; the world's largest bird collection, and more than 23 million entomological specimens. These collections constitute the essential resource and foundation for the implementation of the Museum's scientific and educational mission. The research of AMNH's 200 scientific staff as well as 1,300 national and international scholars who visit the collections or borrow materials annually; educational programs onsite, in the New York City schools, and through web-based dissemination of educational materials; its 42 permanent exhibition halls and annual roster of special exhibitions; hundreds of public programs; and scientific collaborations and educational partnerships with other institutions—all arise from and draw directly upon the Museum's vast collections, libraries and archives.

In order to preserve this irreplaceable record of life on earth, the Museum scientific and operations staff need a comprehensive, up-to-date plan to guide response and recovery efforts concerning the collections in the event of a disaster. The Emergency Preparedness and Response Plan proposed here will guide these efforts and ultimately result in the preservation of the priceless cultural heritage entrusted to the Museum. In addition, the development and dissemination of materials useful to the museum community generally will help to build capacity for safeguarding collections at institutions throughout the country.

3. HOW THE PROJECT FITS INTO STRATEGIC PLAN AND MISSION

This project is a direct response to priorities laid out in the Museum's five year *Strategic Plan 2005-2010* (the plan). (See plan summary.) The plan reaffirms and restates the Museum's founding mission of scientific inquiry and public education, with a new emphasis on the mutuality and integration of these endeavors: "To discover, interpret, and disseminate—through scientific research and education—knowledge about human cultures, the natural world, and the universe." The vital role of the AMNH collections as the source of research, educational outreach, and exhibitions was invigorated by making explicit the connection between the two prongs of the singular mission.

Indeed, states the plan, "The Museum is now in one of the most active periods of collecting in its history." It acknowledges one of the critical issues facing AMNH and all similar institutions in an uncertain economic and political climate: how to protect vast, diverse, growing, and aging collections in the face of budget restraints and competing institutional priorities, while at the same time ensuring and expanding access. Moreover, as the natural and cultural diversity of the planet is reduced with each passing year, the preservation of its collections becomes an increasingly higher strategic priority for AMNH. The Museum has chosen to take an aggressively proactive stance and to apply lessons learned from recent global events.

The plan reflects the Museum's significant investments in and increasingly rigorous stewardship of its collections: the Starr Natural Science Building, completed in 1999, was built to provide high-security, climate controlled storage areas for collections; the museum recently renovated five floors for the Ornithology collections, improving the storage of nearly 720,000 specimens; state-of-the-art storage facilities have been provided for the Anthropology collections; and in 2001 a new frozen tissue repository was built with the capacity to house up to a million frozen tissue specimens in liquid-nitrogen-cooled vats. In 1997 AMNH created the position of Associate Dean of Science for Collections, with responsibility for evaluating and implementing Museum-wide collections management policies, and expanded the position of Registrar of Anthropology to Registrar for all Museum collections. Since then, three additional Registrar positions have been added to this department. In 2001 it created the position of Conservator of Natural Sciences Collections to oversee conservation across all Divisions and established a natural science collections conservation lab.

Major initiatives set forth in the plan rest on the collections. A new Graduate School will grant Ph.D.s in comparative biology for which the vast collection of specimens is essential. The plan outlines the Museum's commitment to expand its leadership role in Microbial Biology through the Institute for Comparative Genomics, "a center for collections, research, and training in the field of non-human comparative genomics." The ethnographic collections are critical to the creation of a new Center for World Cultures. In short, the plan affirms that the Museum's future depends on the stewardship and preservation of its irreplaceable collections.

4. STRATEGIC PLAN: PROCESS AND FINANCIAL RESOURCES

Strategic Plan 2005-2010, adopted by the Board of Trustees in 2004, is the product of months of deliberations by the Board and its Planning Committee, senior management, and staff as well as outside experts and community members. The planning process began with Board Planning Committee meetings in spring 2004 and culminated in a full Board retreat in fall 2004. At the outset, the Planning Committee was presented with an overview of AMNH's recent history and status as well as external and internal factors that define the context in which the Museum positions itself for the future. The Committee later heard and discussed presentations in all core Museum functional areas. Trustee committees in areas of Budget and Finance, Investment, Science Policy and Collections, Education, Exhibition, and Building and Grounds then met to consider proposals in their respective areas. A Science Planning Task Force, chaired by the Museum Provost and including Museum curators and departmental staff, was assembled to consider the strengths, challenges, and needs of various areas of science and arrived at recommendations regarding priorities in research, collections programs, and training. A Staff Planning Committee representing all major functional areas explored three central topics: the Museum as Educator, the Museum's Audience, and the Museum Campus.

Community members provided input and feedback through a variety of avenues. At the governance level, the Board includes seven New York City *ex officio* Trustees. At the neighborhood level, the Office of Government Relations & Strategic Project Development ensures community input through its regular participation in NYC Community Board 7 meetings. At the programming level, the Museum regularly convenes focus groups with different audience segments (youth, adults, families, seniors); conducts formative assessment and testing with audience members for all education programs and products; convenes project advisory groups with representatives of target groups; and carries out both internal and external summative evaluations.

The Museum is successfully meeting its overall financial objective of providing consistent, reliable financial support to maintain and enhance the core mission activities in Science, Education, and Exhibition. It has enjoyed a net increase in net assets of $148 million since 1998, which reached $709 million at the close of FY06. Following 9/11, the Museum acted aggressively to minimize negative impacts while continuing to advance its financial and strategic plans. From 2001 to 2004, the Museum cut $21 million from its operating budget; at the same time, reflecting its strategic objectives, the Museum increased funding for core mission areas of Science, Education, and Exhibition, both in dollars and as a percentage of the operating budget.

Since 9/11 the Museum has stabilized and strengthened its financial position, despite a most challenging financial environment. The Museum has adhered to new strictures growing out of its 2001 Retreat such as assuming no new long-term debt and fully funding all capital initiatives upfront. This was reaffirmed in 2004. The physical plant is in excellent condition, and recent improvements have laid the groundwork for intensified efforts to protect the collections. Given the stability of its financial condition, the Museum is well positioned to sustain its momentum and to continue to achieve its strategic goals and objectives.

5. PROJECT: APPROPRIATENESS FOR INSTITUTION & AUDIENCE

The Emergency Response and Salvage Plan for Natural Science Collections emerges from years of strategic and management planning as the logical response for an institution of the size, scope, and purpose of AMNH. It

makes full use of an integrated team of collections staff, curators, and operations managers, and employs a consistent approach across different departments to preserve collections in the event of a disaster.

The audiences affected by this project include those who are responsible for protecting collections and those who benefit from their use. In the first category are:
1. AMNH curators, scientists, and collections staff. These are internationally renowned scholars for whom AMNH's collections—as well as other institutions' collections—constitute irreplaceable data essential to the advancement of science (Appendix 1). This project will provide them crucial information about the risks facing their collections and enable them to create a prioritized agenda and steps to be taken in the event of a disaster.
2. Collections-based cultural institutions and organizations. Similar institutions in the United States are grappling with an almost identical set of circumstances. The Museum is committed to leverage its expertise and experience to help other institutions, as protecting *all* collections, not just those of AMNH, is vital to creating the largest possible public pool of research and educational material.

The audiences that depend on the preservation of these collections include:
1. The thousands of scholars and researchers from around the nation and the world, as well as post-graduate, graduate, and undergraduate students who use the collections for their research onsite or by loan. Recent initiatives such as the development of digitized databases of the Anthropology and Paleontology collections have expanded this audience significantly through web-based access.
2. Three million onsite and 8.5 million online visitors, for whom the collections serve as the source for exhibitions, educational programs, and materials for teachers, students, families, and communities.

6. PROJECT: RESOURCES - TIME & BUDGET
The project will begin August 1, 2007 and conclude July 31, 2009. The prior experience cited earlier allows accurate estimates of time for major tasks: 1) Develop response and salvage plans: 50% of project resources and time; 2) Design training: 20%; 3) Produce final plan: 10%; 4) Create final products: 10%; 5) Disseminate: 5 %; 6) Evaluate: 5%. The investigators all have records of performance excellence and the Museum has adequate systems in place to support successful project completion. Cost and time estimates are based on vendor/consultant quotes and extensive institutional experience with successful completion of federally supported programs. The project includes significant institutional cost share at an estimated amount of $155,000 in direct costs. Upon completion of the project, responsibility for updating all databases, websites, plans and training will be assumed by the Task Force, and AMNH will institutionalize this project.

7. PROJECT: RESOURCES - PERSONNEL & TECHNOLOGY
The key project personnel comprise an experienced, integrated, cross-functional team, reflecting the institution-wide project scope and goals. Lisa Elkin, Conservator of Natural Sciences Collections, will serve as Project Director. Elkin, M.A. in Art Conservation, served as Associate Conservator in the Museum's Anthropology Division before assuming her current post in 2001. With more than 10 years AMNH experience, she has comprehensive understanding of the building and collections, has served as PI on the prior MfA grant and directed the Mammalogy pilot project. Dieter Fenkart-Froeschl, Director, Operational Analysis, will serve as co-Project Director. Fenkart-Froeschl holds an MBA from Columbia Business School and has worked on disaster recovery planning since he joined AMNH in 2005. A full-time Collections Analyst, with minimum B.A. or B.S in related field and experience in natural sciences collection, will be hired. The Museum will support the time of critical AMNH Curatorial and Operations staff necessary to the project. Expert external consultants funded by this project include Barbara Roberts to advise and review plan development, Barbara Moore and MJ Davis to support design of a training system, and a webmaster. The project will require a high memory laptop, but otherwise AMNH has the technology necessary for data collection, analysis, and online communication and dissemination.

BUDGET FORM: Section B, Summary Budget

	$ IMLS	$ Cost Share	$ TOTAL COSTS
1. Salaries and Wages	$48,134.00	$111,878.00	$160,012.00
2. Fringe Benefits	$18,772.00	$43,632.00	$62,404.00
3. Consultant Fees	$22,500.00		$22,500.00
4. Travel			
5. Supplies and Materials	$4,000.00		
6. Services			
7. Student Support			
8. Other Costs			
TOTAL DIRECT COSTS (1-8)	$93,406.00	$155,510.00	$248,916.00
9. Indirect Costs	$55,801.00	$92,902.00	$148,703.00
TOTAL COSTS (Direct and Indirect)	$149,207.00	$248,412.00	$397,619.00

Project Funding for the Entire Grant Period

1. Grant Funds Requested from IMLS	**$149,207.00**
2. Cost Sharing:	
a. Applicant's Contribution	**$248,412.00**
b. Kind Contribution	
c. Other Federal Agencies*	
d. TOTAL COST SHARING	**$248,412.00**
3. TOTAL PROJECT FUNDING (1+2d)	$397,619.00
Percentage of total project costs requested from IMLS	**37.5 %**

*If funding has been requested from another federal agency, indicate the agency's name:

American Museum of Natural History

Schedule of Completion

Emergency Preparedness And Response Plan for Collections, Libraries and Archives

AMERICAN MUSEUM & NATURAL HISTORY

Task	Sub-task	% Budget	2007 Aug	Sep	Oct	Nov	Dec	2008 Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	2009 Jan	Feb	Mar	April	May	June	July
Develop Emergency Preparedness and Response Plan																										
Internal Planning	Refine plan as needed with internal review																									
	Design templates																									
	Begin database design																									
Execution	Collections Analyst start date						◆																			
Develop Preparedness & Response Plans	Vertebrate Zoology	50%																								
	Invertebrate Zoology																									
	Paleontology																									
	Physical Sciences																									
	Anthropology																									
	Library Services																									
Design system of Training	Train the Preparedness & Response Team	20%													◆			◆								
	Produce training protocols and guides																									
Produce Final Plan	Produce coordinated final plan	10%																			◆					
Create Products	Develop databases and how-to guides	10%																								
	Develop staff training guides																									
	Document planning process																									
	Website content & design development																									
Internal & External Dissemination	Website launch	5%																						◆		
	Prepare and present lectures																									
	Publish in jounals																									◆
Evaluation	Administrative evaluation	5%																								
	Formative evaluation							◆						◆						◆						◆
	External Consultant to review plans		◆					◆						◆						◆						◆
			◆	milestone																						